

REMARKS

Reconsideration of this application is respectfully requested.

Claims 8, 14, and 15, which were indicated as being allowable, have been rewritten in independent form. A check in the amount of \$200.00 is enclosed for the independent claims in excess of three. If any additional amount is required, please charge the cost thereof to our Account No. 07-2069.

New claim 17 has been added. This claim is dependent on claim 1 and includes the subject matter which was described in original dependent claim 8.

Claims 1-7 and 9 were rejected as being anticipated by Marcheggiani. However, claim 1 states that the axis of the orifice forms an acute angle with a tangent to the cylindrical surface, the tangent extending in the direction in which the cylindrical surface rotates. That is illustrated in Figure 2 of the application and described in the first full paragraph on page 9. It is also described in the Summary of the Invention on page 3, which states that the cleaning nozzle is positioned at an acute angle which points in a direction which is opposite to the direction of rotation of the printing cylinder.

In contrast to claim 1, in Figures 1 and 2 of Marcheggiani the roll 22 rotates in the same direction as the direction in which the nozzle 54 points. In Figure 2 the nozzle forms an obtuse angle with the tangent which extends in the direction in which the cylinder rotates.

The examiner refers to column 3, lines 51-54 of Marcheggiani, which state that the angle 60 could be between 0 and 180°. However, with the structure

illustrated in Figure 1, the only way in which the nozzle could form an acute angle with the tangent which extends in the direction in which the cylindrical surface rotates is to reverse the position of the entire doctor system 20. That is illustrated in Figure 4 in which the nozzle extends in a direction which is opposite to the direction of rotation of the endless belt 100. However, in that position the collection receptacle 114 and the drain therein are upstream of the nozzle and not downstream as claim 1 requires.

Claim 1 also states that the suction port is adjacent the cylindrical surface. Although Marcheggiani illustrates a drain 74 which may be connected to a vacuum source, the drain is not adjacent to the cylindrical surface. Indeed, the drain is separated from the cylindrical surface by the receptacle 68.

Claim 7 states that the suction port has a longitudinal axis which forms an acute angle with a tangent to the cylindrical surface, the tangent extending in the direction in which the cylindrical surface rotates. Marcheggiani merely illustrates a drain 74. Even if the drain 74 had a longitudinal axis, the longitudinal axis would not form an acute angle with a tangent to the cylindrical surface.

The examiner rejected claims 10-13 and 16 under 35 U.S.C. §103(a). The examiner states that the use of a nozzle having an air cap mounted on a fluid cap so as to provide a mixture of air and liquid is conventional. Applicant admits that nozzles which include a fluid cap and an air cap are in the prior art. However, there is no teaching or suggestion in the art that a nozzle of the type which is

described in claim 10 could be used in an apparatus for cleaning the surface of a rotating cylinder as described in claim 1. Both the examiner and the applicant have cited references which describe devices for cleaning rotating cylinders. However, none of those references describes such a nozzle. The examiner therefore has no reference which teaches or suggests the combination which is described in claim 10.

Claims 11-13 add additional details which are not described in any of the references, and there is no suggestion in any of the references to make the apparatus which is described in those claims.

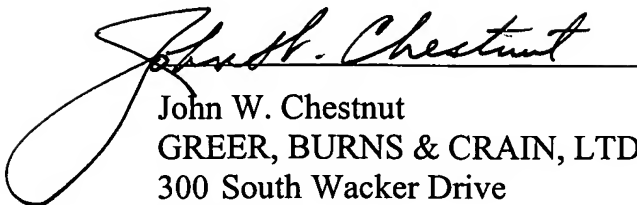
Claim 16 describes a water tube and a water flow meter whereby the water flow rate to the nozzle can be varied with the speed of rotation of the cylinder to get the most effective cleaning at all speeds. That is not described in any of the references.

New claim 17 states that the cleaning head includes a curved surface which is spaced from the cylindrical surface, the suction port being located in the curved surface, the nozzle being spaced from the curved surface. None of the references teaches or suggests the combination of claim 1 and claim 17.

In view of the foregoing, reconsideration and allowance of this application is respectfully requested.

Respectfully submitted,

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John W. Chestnut
GREER, BURNS & CRAIN, LTD.
300 South Wacker Drive
Suite 2500
Chicago, Illinois 60606